

**REMARKS****Overview**

Claims 7-10 and 12-18 are pending in this application. Claims 1-6 have been cancelled. Claims 7 and 12 have been amended. Claims 18 is new. The present response is an earnest effort to place all claims in proper form for immediate allowance. Reconsideration and passage to issuance is therefore respectfully requested.

**Issues Regarding Election/Restriction Requirement**

The Examiner has restricted the invention into two groups. Group I includes claims 1-6 and is drawn to moving a structure of plurality of layers to generate a charge, classified in class 310, subclass 309. Group II includes claims 7-17 and is drawn to converting rotational movement into electrical energy having tire body, radial plys, classified in class 290, subclass 43. The Applicant reaffirms the oral election requirement and elects Group II, claims 7-17. Therefore, claims 1-6 have been cancelled.

**Issues Under 35 U.S.C. § 102**

Claims 7, 8, 11, 12, 14, 16, and 17 have been rejected under 35 U.S.C. § 102(b) as being anticipated by U. S. Patent No. 4,504,761 to Triplett.

Triplett is directed towards a tire which includes piezoelectric elements. In Triplett, a piezoelectric array is mounted inside a pneumatic tire (col. 1, lines 28-29). The piezoelectric array 60 of Triplett includes a multiplicity of piezoelectric elements or crystals 62 bonded to the upper or outer surface 58 of the inner wall 52 (col. 2, lines 46-49). A base 114 of the

piezoelectric array is secured to the interior of the side wall 106 in any suitable fashion, such as through the use of adhesives (col. 4, lines 11-13).

Claim 7 requires "at least one pad integrated between the radial plies to produce an electrical current as the outer wall of the tire body is in rotational movement against the surface." Triplett does not disclose these limitations. In particular, Triplett does not disclose a "pad" and it is not clear what the Examiner considers to be a pad.

In Triplett, note that there is both a generally cylindrical tread portion 42 for outer wall and an inner portion 52 which is spaced from the tread portion 42 to define a chamber 54 for receiving many of the components of the electrical generator (col. 2, lines 35-44). Also in Triplett, there are projections 74 bonded to the under surface 56 of the tread portion 42 and the piezoelectric elements 62 (col. 2, lines 53-64).

Claim 7 has been amended to clarify that the pad is the active element that produces electrical current. In contrast, instead of using a pad, Triplett uses a piezoelectric array which includes an arcuate base 114 with a plurality of piezoelectric elements 116 arranged in circumferentially spaced bands 118. The base 114 is secured to the interior of the side wall 10 (see column 4, lines 3-19; Figs. 5 and 6). The claimed pad is not such a piezoelectric array, but rather is made of an electrical current-producing material. The present invention avoids the piezoelectric elements of Triplett and the complexities associated therewith (such as the need for projections between the piezoelectric elements and the tread). Note that the specification describes some of the advantages of using a pad (see e.g., specification, page 4, lines 8-14).

Therefore, it is respectfully submitted that this rejection to claim 7 must be withdrawn. As claims 8, 11, and 12 depend from claim 7, these rejections must also be withdrawn.

Claim 14 also requires the "pad". For the reasons previously expressed, Triplett does not disclose this limitation. Therefore, this rejection to claim 14 must be withdrawn. As claims 16 and 17 depend from claim 14, these rejections must also be withdrawn.

### **Issues Under 35 U.S.C. § 103**

Claims 13 and 15 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over U. S. Patent No. 4,504,761 to Triplett in view of U. S. Patent No. 6,864,606 to Rose. Triplett is deficient for the reasons previously expressed. Rose does not remedy these deficiencies. Rose, uses coils formed from layers of laminations instead of pads to generate electricity. Therefore these rejections to claims 13 and 15 must also be withdrawn.

### **Allowable Subject Matter**

The Examiner indicates that claims 9 and 11 are objected to as being dependent upon a rejected base claim but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims (Office Action, page 4, numbered paragraph 11). The Applicant gratefully acknowledges that the Examiner has recognized these claims as containing allowable subject matter. However, it is also believed that upon further review, the Examiner will find all claims in proper form for immediate allowance.

### **New Claim**

Claim 18 is new, and is similar in scope to claim 7. Note that instead of referring to a "pad", claim 18 refers to "a flexible material" and requires the flexible material to be in direct

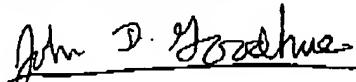
contact with the outer wall. It is believed these limitations further distinguish over the prior art but using alternative language. Support is found at least in Fig. 1.

### Conclusion

No fees or extensions of time are believed to be due in connection with this amendment; however, consider this a request for any extension inadvertently omitted, and charge any additional fees to Deposit Account No. 26-0084.

Reconsideration and allowance is respectfully requested.

Respectfully submitted,



JOHN D. GOODHUE, Reg. No. 47,603  
McKEE, VOORHEES & SEASE, P.L.C.  
801 Grand Avenue, Suite 3200  
Des Moines, Iowa 50309-2721  
Phone No: (515) 288-3667  
Fax No: (515) 288-1338  
**CUSTOMER NO: 22885**

Attorneys of Record

- pw -